CONCLUSIONS CR was seen more commonly in elderly men at periphery of inferolateral location 4 days after AMI in recent groups. Plaque rupture is less common; however, severe three vessel coronary artery disease is seen more frequently.

CATEGORIES CORONARY: Acute Coronary Syndromes

TCT-176

Staged Versus "One-time" multivessel revascularization in patients with non-ST-segment elevation acute coronary syndromes

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BACKGROUND To compare the long-term clinical outcomes of staged percutaneous coronary intervention (PCI) and "one-time" PCI in patients with non-ST-segment elevation acute coronary syndromes (NSTE-ACS) and multivessel coronary disease (MVD).

METHODS From 2009 to 2012, a total of 1414 consecutive NSTE-ACS patients that underwent PCI of culprit and nonculprit lesions for multivessel disease in General Hospital of Shenyang Military Region were prospectively registered. Patients received "one-time" PCI (n=822) or staged PCI (n=592) according to physician's discretion. The primary outcome was the composite of cardiac death or myocardial infarction (MI).

RESULTS Baseline and angiographic characteristics showed staged patients had a worse clinical presentation. The estimated 3-year composite rate of cardiac death or MI was 6.2% for staged PCI, 6.8% for "one-time" PCI (log-rank test: p=0.536). At multivariate analysis, staged PCI was an independent predictor of cardiac death or MI (hazards ratio [HR]:0.581, 95% confidence interval [CI]:0.356-0.948, p=0.022). In a propensity score matched cohort, staged PCI was associated with a significantly lower risk of cardiac death or MI compared to "one-time" PCI (4.5% vs 8.8%, HR 0.466, 95% CI: 0.247-0.879, p=0.016). Subgroup analysis suggested staged PCI might be considered in patients with high risk such as old age, renal dysfunction, diabetes mellitus, previous MI or high GRACE risk score.

CONCLUSIONS Staged PCI is optimal revascularization strategy for patients with NSTE-ACS, especially high-risk patients, with a lower composite of cardiac death or MI compared to "one-time" PCI. Randomized-control trial was needed to confirm this result.

CATEGORIES CORONARY: Acute Coronary Syndromes

KEYWORDS Multivessel percutaneous coronary intervention, Non-ST-segment elevation acute coronary syndromes

TCT-177

Old Saphenous Vein Grafts with important degeneration treated with self-expandable drug-eluting stents: our experience

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BACKGROUND The percutaneous treatment of the obstructive atherosclerotic disease in coronary saphenous bypass grafts remains a challenge in interventional cardiology. Treatment of degenerated saphenous vein grafts still involves a high risk of immediate embolic complications, high incidence of target lesion revascularization and progression of the disease on adjacent segments and often difficulty in the evaluation of the caliber and discrepancy in size in presence of aneurysm. Aim: to evaluate if the use of self-expandable stents may offer an advantage compared to balloon-expandable stents.

METHODS Self-expandable stents may solve the problem of the discrepancy in size, they can be used in presence of aneurysms or of widespread disease of the graft implying a lower risk of malapposition, with less acute thrombosis. They don't require a heavy post-dilatation implying a lower risk of thromboembolism and parietal damage and leading to a reduced risk of in-stent restenosis, edge- restenosis and deterioration of adjacent segments. At this purpose we adopted the "Soft touch technique" which consists in direct stenting (if possible) and postdilatation limited to the most stenotic portion of the graft using undersized balloons (ratio balloon /vessel diameter: 0,8). Self expandable stents increase in diameter in the days following the procedure, this may reduce the incidence of plaque rupture and distal embolization.

RESULTS Between October 2012 and May 2015 we treated 25 patients. 16 patients presented with acute coronary syndrome with evidence of soft plaque and intraluminal thrombosis. Mean age of the grafts: 12 years (4-21 years). In 10 cases we used a distal embolic protection filter. 8 patients had aneurysmatic dilatation of the graft (maximum diameter of the vessels between 6 and 7 mm). No major complications occurred. In one case we implanted a balloon expandable stent at distal edge of self-expandable stent for distal dissection of the vessel with a good final result. In one case we experienced an in-stent restenosis due to distortion of the stent struts caused by the guiding catheter, this ostial lesion was treated successfully with a balloon-expandable stent implantation. Good angiographic result in all cases (final TIMI flow III). Cardiovascular computed tomography performed after 3 months confirmed the patency of the stents. All patients remained asymptomatic during follow-up.

CONCLUSIONS The treatment of degenerated coronary saphenous vein grafts with self-expandable stents and "soft touch technique", being less aggressive on the graft, may reduce the risk of distal embolization and therefore of periprocedural infarction. This technique, implying a minor parietal trauma, may also reduce the incidence of restenosis and solve the problem of mismatch of caliber and widespread disease preventing the implantation of additional stents. Larger and appropriate studies are needed to determine differences, optimize clinical practice and validate our hypothesis.

CATEGORIES CORONARY: Acute Coronary Syndromes

KEYWORDS Saphenous vein graft, Self-expanding stent, STENTYS

TCT-178

Spontaneous coronary artery dissection (SCAD): Predictors and Long-term outcome

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BACKGROUND Spontaneous coronary artery dissection (SCAD) is an unusual cause of acute coronary syndrome. Although the prognosis is good the management is not well established. Our purpose was to describe the clinical presentation, management and long term-outcomes of a retrospective cohort with SCAD.

METHODS A total of 37 patients registered in our institution from 2000 to 2014 were retrospectively studied. The definition of SCAD was based on the presence of medial dissection or intramural hematoma that was recognized by angiography and according with the classification proposed by Saw.

RESULTS 37 patients diagnosed as SCAD (male/female 15/22, age 54±12 [SD] years) were included in the analysis. The clinical presentation was myocardial infarction in 86.5% of patients. SCAD developed after physical or emotional stress in 4 patients (10%) and 7 patients (20%) had hypothyroidism. The left anterior descending artery was involved in 22 patients (60%) and left main was involved in 1 patient. 5 patients had multi-vessel SCAD (13.5%). Recurrences of SCAD were shown in 2 patients (5%). According to the classification proposed by Saw 21 patients (57%) had type 1 dissection (evident arterial wall stain), 11 patients (30%) had type 2 (diffuse stenosis of varying severity) and 5 of them (13%) had type 3 (mimic atherosclerosis) dissection. Coronary artery tortuosity was present in 17 patients (46%) and it is significantly related with MACE (p= 0.001) and complications during PCI (p=0.001). The management of SCAD was